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2003 COMPREHENSIVE  
ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2003



## ACTUARY'S CERTIFICATION LETTER

**McCready and Keene, Inc.**

7941 Castleway Drive

PO Box 50460

Indianapolis, Indiana 46250-0460

September 26, 2003

Indiana Public Employees' Retirement Fund  
Board of Trustees  
143 West Market Street, Suite 500  
Indianapolis, IN 46204

Dear Members of the Board:

Certification of Actuarial Valuations

The actuarial data presented in this report describes the current actuarial condition of the defined benefit pension plans ("Plans") administered by the Indiana Public Employees' Retirement Fund ("PERF"). Valuations are prepared annually as of July 1 for all Plans except the 1977 Police Officers' and Firefighters' Pension and Disability Fund which is annually as of January 1.

Under PERF statutes, employer contribution rates are certified annually for each Plan by the Board of Trustees. These rates are determined actuarially, based on the Board's funding policy. Contribution rates for the PERF Plan as determined by a given actuarial valuation become effective eighteen months after the valuation date (12 months for state employees). For example, the rates determined by the July 1, 2002 actuarial valuation will be used by the Board when certifying the employer contribution rates for the year beginning January 1, 2004 (or for the year beginning July 1, 2003 for state employees). If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the recommended rates before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

**Changes for 2002**

Two major changes were made for the July 1, 2002 PERF Actuarial Valuation.

First, a new data reporting system was adopted early in 2002. This new data reporting system collects salary information on a June 30 fiscal year basis (the prior data reporting system collected salary information on a calendar year basis) and also collects service data on a fiscal year basis (the prior system collected service data through the March 31 preceding the July 1 valuation date). The fiscal impact of this change in the data reporting system is being phased in over a 4-year period.

Also, the pre-existing amortization bases have been eliminated and a new "fresh start" amortization base has been established with a 30-year amortization period.

**Funding Objectives and Funding Policy**

In setting contribution rates, the Board's principal objectives have been:

- to set rates so that the unfunded actuarial accrued liability ("UAAL") will be amortized over a fixed period.
- to set rates so that they remain relatively level over time.

To accomplish this, the Board's funding policy requires that the employer contribution rate be equal to the sum of the employer normal cost rate (which pays the current year's cost) and an amortization rate which results in the amortization of the UAAL in equal installments. The Board has adopted smoothing rules to the determination of the employer contribution rate to reduce the variability of these rates.

No membership growth is anticipated in setting the contribution rate. This is consistent with GASB #25, which prohibits anticipating membership growth in determining the minimum Annual Required Contribution ("ARC").

Under this policy, the objectives of amortizing the UAAL and maintaining relatively level contribution rates over time are achieved.

### Progress Toward Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a Plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches 100%. The funded ratio for each of the Plans (except the Judges' Retirement System) has decreased over the last two years due primarily to investment performance below the actuarial assumed interest rate.

### Benefit Provisions

The benefit provisions reflected in this report are those which were in effect on each Plan's valuation date.

### Assumptions and Methods

Actuarial assumptions and methods used in the valuation are set by the Board, based upon the recommendations of the actuary. The actuary reviews actual plan experience before making these recommendations. The last such review of actuarial assumptions was carried out in connection with the July 1, 2002 actuarial valuation for the PERF Plan and the January 1, 1998 actuarial valuation for the 1977 Municipal Police and Fire pension plan. It is our opinion that the actuarial assumptions for all Plans are internally consistent and are reasonably based on past and anticipated future experience of each Plan.

### Data

Member data for retired, active and inactive members was supplied as of each Plan's valuation date by Covansys, a data vendor for PERF. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. Asset information for each Plan was supplied by PERF and Covansys.

### Certification

I certify that the information presented herein is accurate and fairly portrays the actuarial position of each Plan administered by PERF as of each Plan's 2002 valuation date.

I prepared the exhibits in the "Actuarial Section" which include Summary of Actuarial Assumptions and Methods, the Reconciliation of Changes in Unfunded Actuarial Accrued Liabilities, the Solvency Tests, the Schedules of Active Member Valuation Data, and the Schedules of Retirants and Beneficiaries. In addition, I reviewed the Schedules of Funding Progress and Schedules of Employer Contributions in the "Financial Section."

All of my work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Indiana state law and, where applicable, the Internal Revenue Code, Employee Retirement Income Security Act (ERISA), and the Statements of the Governmental Accounting Standards Board. I am an independent Enrolled Actuary and Member of the American Academy of Actuaries and experienced in performing valuations for large public retirement systems.

If you have any questions or require additional information, please don't hesitate to contact me.

Sincerely,



Douglas Todd  
A.S.A., M.A.A.A., F.A.  
Senior Actuary

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS *As of July 1, 2002*

- Note 1: Effective July 1, 2001, PERF uses mortality rates according to 1994 U.S. UP-94 (sex distinct). 100% of the rates are used for post-retirement mortality. 60% of the female rates and 50% of the male rates are used for pre-retirement mortality. All other plans use mortality rates according to 1983 GAM (sex distinct).
- Note 2: Actuarial funding method for all systems is Entry Age Normal Cost, except the Accrued Benefit (Unit Credit) funding method is used for the Legislators' Defined Benefit Plan. Actuarial experience gains and losses are amortized on a level dollar basis for all systems. The amortization period is closed for all systems except the 1977 Police Officers' and Firefighters' Pension and Disability Fund and the Prosecuting Attorneys Retirement Fund which have an open amortization period.
- Note 3: Actuarial asset valuation method is according to example (6) in IRS Regulation 1.412(c)(2)-1(b)(9) for all systems except PERF where valuation assets are equal to 75% of expected actuarial value plus 25% of market value.

### Indiana Public Employees' Retirement Fund July 1, 2002 Actuarial Valuation

Investment Return	Post-Ret. COLA	Salary Scale	Retirement Rates			Disability Rates			Termination Rates		
7.25 %	2.00 %	Based on PERF Exp., 1995-2000, Sample Rates:	Based on PERF Exp., 1995-2000, Sample Rates:			Based on PERF Exp., 1995-2000, Sample Rates:			Based on PERF Exp., 1995-2000, Sample Ultimate Rates:		
		Age      Rate	Age	Male: Rate	Female: Rate	Age	Male: Rate	Female: Rate	Age	Male: Rate	Female: Rate
		25      17.00 %	60	8 %	12 %	45	0.1%	0.1 %	25	10.0 %	10.0 %
		35      8.67	62	32	26	50	0.3	0.2	30	10.0	10.0
		45      7.00	65	40	35	55	0.4	0.3	35	7.5	7.5
		60      4.94	70 +	100	100	60	0.8	0.5	45	4.0	6.0

### 1977 Municipal Police and Fire January 1, 2002 Actuarial Valuation

Investment Return	Post-Ret. COLA	Salary Scale	Retirement Rates	Disability Rates	Termination Rates
7.50 %	3.00 %	5.00 %	Later of (a) age 52, (b) 20 years service, or (c) current age plus 1 year	150% of 1964 OASDI Sample Rates	Sarason T-1 Sample Rates
				Age      Male and Female	Age      Male and Female
				40      0.3 %	30      3.7 %
				50      0.9	40      1.1
				60      2.4	50      0.0
				64      3.5	55      0.0

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS *As of July 1, 2001 (continued)***Judges' Retirement System**

July 1, 2002 Actuarial Valuation

Investment Return	Post-Ret. COLA	Salary Scale	Retirement Rates	Disability Rates	Termination Rates
7.25 %	5.00% for 1977 System None for 1985 System	5.00 %	Later of (a) age 65, (b) 8 years service, or (c) current age plus 1 year	1964 OASDI Sample Rates	Sarason T-4 Sample Rates
				Age	Male and Female
				Age	Male and Female
				40	0.2 %
				50	0.6
				60	1.6
				64	2.3
				30	5.1 %
				40	4.2
				50	2.5
				55	0.9

**Legislators' Defined Benefit Plan**

July 1, 2002 Actuarial Valuation

Investment Return	Post-Ret. COLA	Salary Scale	Retirement Rates		Disability Rates		Termination Rates	
7.25 %	2.00 %	3.00 %	Sample Rates:		75% of 1964 OASDI Sample Rates		Sarason T-2 Sample Rates	
			Age	Male and Female	Age	Male and Female	Age	Male and Female
			55-61	10 %	40	0.2 %	30	5.1 %
			62	50	50	0.5	40	3.5
			63-64	10	60	1.2	50	0.4
			65 +	100	64	1.7	55	0.0

**Prosecuting Attorneys' Retirement Fund**

July 1, 2002 Actuarial Valuation

Investment Return	Post-Ret. COLA	Salary Scale	Retirement Rates	Disability Rates	Termination Rates
7.25 %	None	5.00 %	Later of (a) age 62, or (b) 10 years service	75% of 1964 OASDI Sample Rates	50% every 4 years
				Age	Male and Female
				Age	Male and Female
				40	0.2 %
				50	0.5
				60	1.2
				64	1.7

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

As of July 1, 2001 (continued)

Excise Police and Conservation Enforcement Officers' Retirement Plan

July 1, 2002 Actuarial Valuation

Investment Return	Post-Ret. COLA	Salary Scale	Retirement Rates	Disability Rates			Termination Rates	
7.25 %	2.00 %	5.00 %	Later of (a) age 60, or (b) earlier of age 65 or 10 years service	200% of United Auto Workers Sample Rates			Sarason T-6 Sample Rates	
				Age	Male	Female	Age	Male and Female
				40	0.1 %	0.2 %	30	7.4 %
				50	0.4	0.5	40	6.1
				60	1.8	2.4	50	3.6
				64	4.4	5.8	55	1.4



## RECONCILIATION OF CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES

*(Dollars in Thousands)*

System	July 1, 2002 Unfunded Actuarial Accrued Liability (UAAL)	Amort. Payments	Interest for Year	Liability (Gain) Loss	Asset (Gain) Loss	Change in Benefit Provisions or Assump.	July 1, 2003 UAAL
Public Employees' Retirement Fund	\$ (417,632)	\$ 21,555	\$ (28,716)	\$ 330,788	\$ 363,685	\$ (198,402)	\$ 71,278
1977 Police Officers' and Firefighters' Pension and Disability Fund*	129,264	(10,181)	8,931	(7,140)	72,635	0	193,509
1977 and 1985 Judges' Retirement System	73,570	(5,408)	4,942	(13,958)	8,133	0	67,279
Legislators Defined Benefit Plan	843	(74)	56	(141)	374	0	1,057
Prosecuting Attorneys' Retirement Fund	9,345	(720)	625	304	874	0	10,428
Excise Police & Conservation Enforcement Officers' Retirement Plan	15,103	(1,200)	1,008	960	2,654	0	18,524

\* Beginning Date of 1-1-2002 rather than 7-1-2002, and ending date of 1-1-2003 rather than 7-1-2003.

## SOLVENCY TEST

(Dollars in Thousands)

System	As of July 1	Actuarial Accrued Liabilities			
		(1) Active Member Contributions	(2) Retired and Beneficiaries	(3) Active Member (Employer Financed Portion)	(4) Total Actuarial Accrued Liabilities
<b>Public Employees' Retirement Fund</b>	1997	\$ 1,264,456	1,893,179	3,126,230	\$ 6,283,865
	1998	1,288,353	2,074,561	3,267,237	6,630,151
	1999	1,428,913	2,158,640	3,488,428	7,075,981
	2000	1,647,901	2,303,679	3,748,305	7,699,885
	2001	1,728,972	2,426,062	4,150,638	8,305,672
	2002	1,886,124	2,582,149	4,597,859	9,066,132
<b>1977 Police Officers' and Firefighters' Pension and Disability Fund (As of 1-1 instead of 7-1)</b>	1997	\$ 138,677	54,115	628,136	\$ 820,929
	1998	160,266	62,842	729,297	952,405
	1999	184,102	329,662	801,511	1,315,275
	2000	210,396	353,230	887,828	1,451,454
	2001	238,840	384,128	997,326	1,620,294
	2002	273,787	447,042	1,087,925	1,808,754
<b>1977 and 1985 Judges' Retirement System</b>	1997	\$ 12,338	66,715	70,952	\$ 150,005
	1998	13,345	76,397	71,103	160,845
	1999	13,986	82,200	80,115	176,301
	2000	14,922	87,326	80,200	182,448
	2001	15,661	96,854	76,095	188,610
	2002	16,892	86,997	84,545	188,434
<b>Legislators' Defined Benefit Plan</b>	1997	\$ 0	2,091	3,338	\$ 5,429
	1998	0	2,152	3,233	5,385
	1999	0	2,388	3,085	5,473
	2000	0	2,152	3,302	5,453
	2001	0	2,431	3,077	5,508
	2002	0	2,326	3,177	5,503
<b>Prosecuting Attorneys' Retirement Fund</b>	1997	\$ 4,066	1,475	3,964	\$ 9,504
	1998	5,056	1,624	4,676	11,356
	1999	5,928	1,879	5,905	13,712
	2000	7,033	2,040	4,869	13,943
	2001	8,203	2,162	10,052	20,417
	2002	9,361	1,965	11,060	22,386
<b>Excise Police &amp; Conservation Enforcement Officers' Retirement Plan</b>	1997	\$ 2,406	11,365	24,688	\$ 38,460
	1998	2,466	13,407	25,805	41,679
	1999	2,690	13,451	27,227	43,368
	2000	2,863	14,689	28,720	46,272
	2001	3,026	17,116	31,882	52,024
	2002	3,102	18,770	34,012	55,884



SOLVENCY TEST *(continued)*

System	Actuarial Value Of Assets	Portion of Actuarial Accrued Liabilities Covered by Assets			
		(1)	(2)	(3)	(4)
<b>Public Employees' Retirement Fund</b>	\$ 6,304,948	100.0 %	100.0 %	100.0%	100.3 %
	6,914,957	100.0	100.0	100.0	104.3
	7,595,266	100.0	100.0	100.0	107.3
	8,267,657	100.0	100.0	100.0	107.4
	8,723,304	100.0	100.0	100.0	105.0
	8,994,854	100.0	100.0	98.4	99.2
<b>1977 Police Officers' and Firefighters' Pension and Disability Fund*</b>	\$ 909,519	100.0 %	100.0 %	100.0 %	110.8 %
	1,044,361	100.0	100.0	100.0	109.7
	1,184,905	100.0	100.0	83.7	90.1
	1,338,554	100.0	100.0	87.3	92.2
	1,491,030	100.0	100.0	87.0	92.0
	1,615,245	100.0	100.0	82.2	89.3
<b>1977 and 1985 Judges' Retirement System</b>	\$ 69,357	100.0 %	85.5 %	0.0 %	46.2 %
	79,594	100.0	86.7	0.0	49.5
	91,073	100.0	93.8	0.0	51.7
	103,733	100.0	100.0	1.9	56.9
	115,040	100.0	100.0	3.3	61.0
	121,155	100.0	100.0	20.4	64.3
<b>Legislators' Defined Benefit Plan</b>	\$ 3,834	NA	100.0 %	52.2 %	70.6 %
	4,041	NA	100.0	58.4	75.0
	4,319	NA	100.0	62.6	78.9
	4,557	NA	100.0	72.9	83.6
	4,666	NA	100.0	72.6	84.7
	4,446	NA	100.0	66.7	80.8
<b>Prosecuting Attorneys' Retirement Fund</b>	\$ 5,970	100.0 %	100.0 %	10.8 %	62.8 %
	7,144	100.0	100.0	9.9	62.9
	8,322	100.0	100.0	8.7	60.7
	9,781	100.0	100.0	14.5	70.2
	11,073	100.0	100.0	7.0	54.2
	11,957	100.0	100.0	5.7	53.4
<b>Excise Police &amp; Conservation Enforcement Officers' Retirement Plan</b>	\$ 26,324	100.0 %	100.0 %	50.8 %	68.4 %
	28,663	100.0	100.0	49.6	68.8
	31,510	100.0	100.0	56.4	72.7
	34,368	100.0	100.0	58.6	74.3
	36,921	100.0	100.0	52.6	71.0
	37,360	100.0	100.0	45.5	66.9



## SCHEDULES OF ACTIVE MEMBER VALUATION DATA

(Dollars in Thousands—except Average)

System	As of July 1	Active Members	Active Members		
			Annual Payroll	Average Pay	Percent Increase
<b>Public Employees' Retirement Fund</b>	1997	142,011	\$ 3,056,390	\$ 21,522	4.9 %
	1998	141,383	3,110,162	21,998	2.2
	1999	141,441	3,250,197	22,979	4.5
	2000	146,613	3,482,453	23,753	3.4
	2001	145,019	3,587,080	24,735	4.1
	2002	143,234	3,851,761	26,891	8.7
<b>1977 Police Officers' and Firefighters' Pension and Disability Fund</b>	1997	8,113	\$ 262,590	\$ 32,367	3.8 %
	1998	8,655	291,479	33,677	4.0
	1999	9,228	321,348	34,823	3.4
	2000	9,729	352,377	36,219	4.0
	2001	10,388	389,200	37,466	3.4
	2002	10,179	396,246	38,928	3.9
<b>1977 and 1985 Judges' Retirement System</b>	1997	321	\$ 29,228	\$ 91,053	2.3 %
	1998	339	30,853	91,012	0.0
	1999	341	30,963	90,801	(0.2)
	2000	336	30,428	90,560	(0.3)
	2001	328	29,748	90,695	0.1
	2002	282	25,805	91,507	0.9
<b>Legislators' Defined Benefit Plan</b>	1997	76	*NA	*NA	*NA
	1998	64	NA	NA	NA
	1999	60	NA	NA	NA
	2000	60	NA	NA	NA
	2001	58	NA	NA	NA
	2002	58	NA	NA	NA
* Benefits are not based on annual payroll.					
<b>Prosecuting Attorneys' Retirement Fund</b>	1997	192	\$ 11,811	\$ 61,513	0.2 %
	1998	181	11,673	64,494	4.8
	1999	202	12,566	62,210	(3.5)
	2000	240	13,422	55,926	(10.1)
	2001	211	13,636	64,624	15.6
	2002	205	14,438	70,427	9.0
<b>Excise Police &amp; Conservation Enforcement Officers' Retirement Plan</b>	1997	246	\$ 9,855	\$ 40,061	14.0 %
	1998	247	10,137	41,040	2.4
	1999	269	11,317	42,071	2.5
	2000	261	11,306	43,318	3.0
	2001	255	12,486	48,966	13.0
	2002	254	12,654	49,818	1.7

## SCHEDULES OF RETIRANTS AND BENEFICIARIES

(Dollars in Thousands—except Average)

System	Year Begin 7-1	Added to Rolls		Removed From Rolls		Rolls – End of Year		% Increase in Annual Allowances+	Average Annual Allowances+
		No.	Annual Allowances+	No.	Annual Allowances+	No.	Annual Allowances+		
<b>Public Employees' Retirement Fund</b>	1996	2,860	\$ 15,938	\$ 1,494	\$ 5,057	45,151	\$ 186,873	8.0	\$ 4,139
	1997	3,215	17,785	1,592	5,600	46,774	204,783	9.6	4,378
	1998	2,817	16,859	1,637	6,002	47,954	215,084	5.0	4,485
	1999	3,101	18,686	1,750	6,590	49,305	229,846	6.9	4,662
	2000	3,040	19,133	1,576	6,154	50,769	244,320	6.3	4,812
	2001	3874	23,742	3,701	15,771	50,942	263,010	7.6	5,163
<b>1977 Police Officers' and Firefighters' Pension and Disability Fund</b>	1996	NA	NA	NA	NA	241	\$ 2,728.9	23.8	\$ 11,323
	1997	39	\$ 466.0	\$ 7	\$ 72.7	273	3,199.3	17.2	11,719
	1998*	1,312	20,911.7	41	643.9	1,544	23,811.6	644.3	15,422
	1999	153	2,606.0	51	790.1	1,646	25,710.5	8.0	15,620
	2000	134	2,070.9	63	805.1	1,717	27,729.3	7.9	16,150
	2001	275	4,477.4	126	1,336.5	1,866	31,587.3	13.9	16,928
*Indiana statute transferred benefit recipients as of July 1, 1998 from 1925, 1937 & 1953 Funds to this Fund.									
<b>1977 and 1985 Judges' Retirement System</b>	1996	NA	NA	NA	NA	210	\$ 6,335.4	14.8	\$ 30,169
	1997	9	\$ 411.9	4	\$ 79.7	215	6,994.1	10.4	32,531
	1998	18	877.8	12	313.7	221	7,393.2	5.7	33,454
	1999	16	715.5	8	180.7	229	7,822.1	5.8	34,158
	2000	20	935.8	7	175.0	242	8,484.8	8.5	35,061
	2001	11	424.4	18	838.2	235	8,031.0	(5.3)	34,174
<b>Legislators' Defined Benefit Plan</b>	1996	NA	NA	NA	NA	27	\$ 182.0	14.8	\$ 6,743
	1997	2	\$ 8.9	0	\$ 0.0	29	193.3	6.2	6,667
	1998	5	30.5	0	0.0	34	225.4	16.6	6,629
	1999	1	2.4	3	17.6	32	211.3	(6.3)	6,603
	2000	5	37.1	2	13.0	35	237.3	12.3	6,779
	2001	0	0.0	1	5.4	34	232.0	(2.2)	6,822
<b>Prosecuting Attorneys' Retirement Fund</b>	1996	NA	NA	NA	NA	13	\$ 149.7	14.4	\$ 11,517
	1997	1	\$ 13.8	0	\$ 0	14	168.6	12.6	12,042
	1998	2	32.1	0	0	16	200.6	19.0	12,540
	1999	1	13.5	0	0	17	220.2	9.8	12,951
	2000	2	16.0	0	0	19	236.1	7.3	12,429
	2001	0	0.0	1	17.1	18	216.2	(8.5)	12,009
<b>Excise Police &amp; Conservation Enforcement Officers' Retirement Plan</b>	1996	NA	NA	NA	NA	111	\$ 1,008.9	5.7	\$ 9,089
	1997	10	\$ 177.6	7	\$ 54.8	114	1,152.1	14.2	10,107
	1998	3	51.0	5	38.3	112	1,186.0	2.9	10,589
	1999	10	123.6	3	34.5	119	1,294.6	9.2	10,879
	2000	10	223.7	7	66.2	122	1,470.1	13.6	12,050
	2001	7	154.1	1	16.4	128	1,619.3	10.1	12,651

+Includes employee annuities